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THE HIGHEST USE OF LEARNING:

AN

ADDRESS

DELIVERED AT HIS

INAUGURATION TO THE PRESIDENCY

OF

AMHERST COLLEGE:

BY REV. EDWARD HITCHCOCK, LL. D.

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## INAUGURAL ADDRESS.

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THE cause of education, in this country at least, is almost universally popular. Yet were we to pass around the inquiry among the different classes of society, why they regard it so important, we should probably receive very different answers. One man, himself uneducated, places its chief value in the means it affords of defence against the impositions of the designing and unprincipled. Another values it chiefly because it enables him to take advantage of the ignorance of the world in promoting his schemes of self-aggrandizement. A third looks upon the means which education affords for acquiring property, as its highest use. A fourth regards the personal reputation, respect, and influence, which learning bestows, as its chief advantage. A fifth thinks of it mainly as an instrument of advancing civilization, and multiplying the comforts and luxuries of life. A sixth estimates most highly its influence in elevating the lower classes of the community above the condition of mere animals and drudges, and in making them understand that the body is not the only part of man to be cared for. A seventh places the highest use of learning in its power of disciplining and liberalizing the mind, and delivering it from vulgar fears, superstitions, and prejudices; and in giving to men just views of their rights, relations, and destinies. An eighth thinks most of the boundless fields of enjoyment which knowledge opens to the human mind, of a far more noble and refined kind than any dependent upon animal nature. A ninth makes its most important use to consist in its bearings upon religion, both natural and revealed.

Now in my opinion, this ninth man has the right of the matter most decidedly ; and yet, I fear that his opinion is not the most common, or the most popular. But to my conviction, the religious applications of learning are by far its most important use : and the occasion seems to be a fit one to defend and illustrate this opinion. It needs, I believe, both defence and illustration. For though the belief is general that religion may derive some benefit from particular branches of learning, there is still an impression lingering on many minds, that some sciences are unfriendly in their bearings upon religion ; and that others have no relations to religion. Much less is it generally believed that the strongest reason why we should sustain common schools, Academies, and Colleges, is, that we are thus promoting the cause of true religion. But if this be indeed true, then, when we give our property, our influence, or ourselves, to the cause of learning, we shall do it with a heartier good will and a more entire consecration ; and we shall the more cheerfully bear up under the trials, fatigues, disappointments, and perplexities, that lie in our path.

I would not, indeed, undervalue the secular advantages of learning. They are so obvious and so important, that I could not do it if I would. Those whose experience reaches back fifty, or forty, or even thirty years, have evidence in their own consciousness of the economical value of learning, too strong to be overcome by any speculative argument depreciating its importance. When we compare the present condition of the world, and our own condition, with what they were in our early days,—we cannot but be deeply impressed with the rapid progress of society, and the multiplication of secular advantages, and the means of comfort and happiness, growing out of the advancement of learning. Branches of science and literature, which, at the beginning of this century, were *tabooed* to all who were not residents within the walls of Universities and Colleges, and even some branches that scarcely had an existence then, are now the theme of familiar conversation in the workshop, on the farm, in the stage-coach, the rail car, the steamboat, and the packet. And so simplified are the elementary principles of many of these branches, as to be brought within the comprehension of

the child at the primary school. Instead of the stinted sources of information then possessed, in a few small newspapers and periodicals in some of the larger cities, and a few republications of small European works, the country is now flooded with newspapers of all sizes below one that will swallow up an octavo, and with periodicals and books to suit all tastes, and all purses, and all fancies, from the penny pamphlet up to the seven hundred dollar volume of Audubon.

Still more striking has been the progress of the useful arts from the application of scientific principles. In Great Britain, at this moment, steam performs a work that would require the unaided labor of more than four hundred millions of men ; and a work as great probably in proportion to the population, in our own country. Improvements in machinery and in chemical processes have doubtless within this century made a still greater deduction from the amount of labor necessary ; and these improvements reach every class of the community ; pointing out to them an easier path to competence, and affording them leisure to cultivate their intellectual and moral powers. Then too, how striking the change in respect to intercommunication, both on land and water. We now hardly give a serious parting to our friend who starts upon a trip of only some five hundred or a thousand miles, so soon shall we see him again. And even when we have bid him adieu, as he starts on foreign travel, we hardly begin to reckon his absence by months, certainly not as formerly by years, ere he greets us again ; having made the tour of Europe, or perhaps stood within the Holy City, or coasted the shores of the Black Sea and the Caspian, or gone down the Red Sea to India and the Celestial Empire, and returning by the Isthmus of Panama, has completed the circuit of the globe. And besides the problem has just been solved, of carrying on a conversation and transacting business with our friend when absent, even though hundreds, and it may be thousands of miles, intervene between us.

Now these are advantages derived from the progress of learning so obvious as to be known and read of all men ; and, therefore, we are apt to suppose them the chief advantages. Whereas the applications of literary and scientific truths to religion

lie more out of sight, and can be appreciated fully, only by him, who is well acquainted both with learning and religion ; and who looks at their relations with the eye of a philosopher. We must dwell a little, therefore, upon these relations in order to sustain the position that has been taken.

I need not argue before such an audience as this, the superior importance of religious principles to all others. This will be admitted ; for all other truths have reference to time, these to eternity : all others regard man's mortal, these his immortal interests : all others are limited by created natures ; these centre in the uncreated God. Religious principles, therefore, are in their very nature of infinite moment. Other truths have gradations of value : but these are invaluable, because necessarily immortal and infinite. Every thing, therefore, in literature or science, that discovers, illustrates, or confirms, the eternal principles of religion, swells into an importance proportionably great. It remains, then, only to show that the wide fields of learning afford us such illustrations over their entire surface, and the position will be made out, that the religious applications of literature and science, are the most important of all their relations ; and that consequently, when we consecrate our property, our influence, or our lives, to the cause of education, we consecrate them to one of the noblest of all human enterprises.

Accompany me now, my friends, as we rapidly pass around the circle of literature and science, in order that we may see what are the relations between religion and the different branches of human learning.

We meet, first, with the ancient classics, whose study forms so important a part of a liberal education in modern times. The religious principles which they contain, are, indeed, fatally false ; and not much more consonant with modern views, is their philosophy. Nevertheless, they afford most important aid in elucidating revelation. The very absurdity of the mythology and philosophy of the classics, brings out by contrast, in bolder relief the beauties and glories of Christian doctrines and Christian philosophy ; and instead of leading the student to embrace polytheism, they prepare his mind for the reception of the Gospel. Besides, many passages of Scripture would be unintelligi-

ble, and others unimpressive, without that knowledge of ancient opinions and manners which the classics disclose. And then too, how unfit to give a correct interpretation of Scripture is he, who is unacquainted with the languages in which it was originally written. It does not prove this position false, to state, what is certainly true, that many men have faithfully preached the Gospel and been instrumental of the conversion of great numbers, who were ignorant of classical literature. So there have been surgeons and physicians, unacquainted with anatomy, physiology, and chemistry ; and they may have performed many skillful operations and effected many cures, and thus done much good. But other things being equal, no one would feel as safe in the hands of such practitioners as in those familiar with the structure of the human system, and with the laws that govern it, and with the chemical nature and action of medicines. In difficult cases such practitioners would shrink from prescriptions and operations ; or if they rashly attempted them, would be very likely to tie the omo-hyoid muscle instead of the carotid artery ; or to administer nitric acid in connection with mercury ; or by some analogous blunder, to put the patient's life in jeopardy. And mistakes alike dangerous, sometimes infinitely more so, because they involve the loss of the soul, must he be liable to make, who engages in the ministerial office, ignorant of the original languages in which the scriptures were written. And if, one such fatal mistake should result from his ignorance, what a terrible drawback would it be upon a whole life of devoted usefulness.

In modern times human learning has become so prodigously expanded, and so many new branches have been established, that it is difficult to discourse intelligibly concerning it without defining the terms which we employ. In France and Germany, the word Literature, embraces the whole circle of written knowledge ; and with many English writers it has the same wide signification. But often the meaning is restricted to those branches which treat of the social, moral, and intellectual relations of man. Polite Literature, or Belles Lettres, is still more limited in its meaning ; embracing poetry, oratory, and perhaps history, biography, and some other miscellaneous sub-

jects. The term science is applied to those branches whose principles are considered as well settled; and with the exception of some parts of mathematics, the term is chiefly confined to the material world; although moral science, and intellectual science, are phrases frequently used.

Adopting these definitions, we might arrange all human knowledge under the three heads of Literature, Science and Art. Let us first inquire into the influence of modern literature upon religion.

And here it must be acknowledged in the outset, that not a little of the influence of modern polite literature has been very disastrous to religion. For much of it has been prepared by men who were intemperate, or licentious, and secretly or openly hostile to Christianity; at least to its peculiar doctrines. And their writings have been deeply imbued with immorality, or infidelity, or atheism. Yet the poison has been often so interwoven with those fascinations of style, or thought, characteristic of genius, as to be unnoticed by the youthful mind, delighted with smartness and brilliancy. And even when the plague spots have been pointed out, it has tended, like the prohibition of the fruit of the tree of knowledge in Eden, to excite an irresistible desire to open the proscribed volumes, even though they should prove a second box of Pandora.

Perhaps no branch of literature has been oftener and more successfully employed as a vehicle for the propagation of infidel opinions, than history. Rightly understood, and faithfully interpreted, it gives strong light and confirmation to revelation and to morality. But sceptical ingenuity has often been able to make its voice as ambiguous as a Delphic Oracle, and as fallacious as ventriloquism. In Pagan Greece and Rome, their historians, except perhaps Tacitus, were even over credulous on the subject of polytheistic religion. And so in modern times, previous to the last century, the historian was usually the supporter of revealed truth. But the talented yet anomalous Bayle, in that manual of irreligion, his Critical Dictionary, led the way in converting facts into an engine against Christianity. Voltaire and others learnt the lesson, which was perfected by Gibbon and Hume. So often however have their sophistries and cavils been exposed that it is only the unwary who are now entrapped. The great mass of Historical literature also, your Rollin and

Ramsay, Muller, Schlegel, Heeren, Goldsmith, Smollet, Russell, Turner, Robertson, and a multitude of others, are favorable to religion ; although a Von Rotteck, in the costume of a baptized infidel, rejects biblical history as fabulous. Religion, therefore, need have no fears from her alliance with history : and, indeed, she may hope for many a rich harvest of illustration and confirmation from future researches : for there are other papyri to be unrolled, other hieroglyphics to be decyphered, and other Sir William Joneses and Champollions to be raised up.

Another most sacrilegious perversion of polite literature consists in clothing immorality and irreligion in the vestal robe of poetry. I say sacrilegious ; for poetry is the natural handmaid of pure religion. Hence it was chosen by the Holy Ghost as the appropriate language of prophets and other inspired men. But it is the appropriate language of all strong emotions ; and may, therefore, be employed for giving an attractive dress to immoral and irreligious sentiments, as well as to those which are virtuous and holy. Accordingly, so wide has been this misapplication of the poetic talent, that in almost every age, its highest efforts have been consecrated to polytheism, or war, or amorous intrigues, or intemperance, or to secure favor from the great, by flattering their vanity. Indeed, though the Old Testament is full of poetry, and though it has ever been employed in the religious worship of Jews and Christians, yet it seems not to have been imagined till lately, that this delightful art had been perverted and degraded by being employed to sustain heathenism, and to pander to intemperance, licentiousness, and war ; nor that it could ever be made thoroughly Christian, and thus exalted in character and effect. The great poets of antiquity were so fully heathen, and some of them, as Anacreon and Horace, had woven so many garlands for the intoxicating cup, that it seems to have been taken for granted that the muse could never be made to pour forth numbers as sweet and enticing on loftier and purer themes. Even the splendid efforts of Milton and Dante, did not open the eyes of Christians to the true use of poetry. Indeed, the polytheistic and warlike numbers of Homer and Virgil, and the Bacchanalian songs of the ancient lesser poets were piety and purity, compared to the philosophic blasphemy of

Shelley, the atheism and profligacy of Byron and Moore, and, must I add, the Bacchanalian songs of Robert Burns. Furthermore, if it be true, as Milton affirmed, that a poet's life is itself a true poem, we shall be obliged sadly to swell the list of modern poems devoted to vice and irreligion. For when biography informs us that Addison, Prior, and Steele, were intemperate, that Thompson was a voluptuary, Goldsmith dissipated, Sterne a decided sensualist, and that even Johnson could practice abstinence but not temperance, and when we know, that though Pope's constitution was too delicate to allow him to indulge in luxurious excesses, yet his writings show a bad pre-eminence of wantonness and indecency, we are led to exclaim with Milton,

“God of our fathers, what is man !  
Nor do I name of men the common route,  
That wandering loose abroad,  
Grow up and perish as the summer fly ;  
Heads without name, no more remember'd ;  
But such as thou hast solemnly elected,  
With gifts and graces eminently adorned,  
For some great work, thy glory.”

And then too, consider the moral character of modern dramatic poetry, so decidedly worse than the noble tragic poetry of antiquity. From the days of Dryden to the present, (for even Shakspeare with all his splendid moral sentiments was undoubtedly a libertine in principle and practice,) scarcely a dramatic poet has appeared whose “entire unweeded volumes,” as Hannah More calls them, can be conscientiously recommended, save the Comus and Samson Agonistes of Milton, and a few other plays of kindred character. We have seen too, that Lyric poetry,—more influential than any other upon public morals,—has been prostituted to the cause of intemperance and revelry, from the time when Anacreon indited his *Ὕγιη μελανά πίνει*, and Horace his *Nunc est bibendum*, down to the period when Burns exclaimed,

“We'll take a cup of kindness yet  
For auld lang syne ;”

or still later, when the echo came from Moore ;

"Friend of my life, this wine cup sip."

But thanks be to God, that in these latter days he has created some greater and some lesser Christian lights, and placed them in the poetic firmament; where they already begin to rule the day and the night. First came Milton: a permanent sun; not immaculate indeed, but full of glory, and destined for a long time to rule the day. Then appeared a milder luminary; foremost in the train of evening, and delightful to look upon, as reflected from the volumes of Cowper. And a noble train of kindred lights, most of them, indeed, lesser stars, have since shone in the literary heavens, bearing the names of Watts, Heber, Montgomery, Young, and others; to which I might add several lights that have dotted the darkness of our western hemisphere. We were also startled, not long since, by the flash of a meteor, shooting athwart the eastern heavens, and having marked out the Course of Time, vanishing from sight,

"As sets the morning star, which goes not down  
Behind the darkened west, nor hides obscur'd  
Among the tempest of the sky, but melts away  
Into the light of heaven."

Nor ought I to omit to point to that noble luminary, which, for so long a period, has been burning with a mild and steady light above the lakes and mountains of northern England; and which gives us some foretaste of what the literary hemisphere will be, when poetic inspiration shall consent to receive a higher inspiration from the fountain of Scripture; far purer than Castalia. To bring about that golden age of poetry, should be the grand object of its cultivators; especially of those who can claim the *nascitur, non fit*. Then and not till then, will it be seen how noble an auxiliary to virtue and religion is the poetic element in man.

There is another department of polite literature that has been, still more than poetry, monopolized by vice and irreligion; and which, I fear, will be still harder to reclaim. To minds averse to close thinking; to those whose tastes and habits are all artificial, and who have never acquired a relish for the beauties and wonders of nature; as well as to those who are the slaves of appetite and passion; the novel and the romance have ever possessed irresistible attractions. And since, these three classes

form, to a greater or less extent, the principal part of society, this is the literature that is most widely and abundantly diffused. And while the demand has created a supply, so, according to a principle of political economy, a surplus supply has increased the demand. The pen and the press have been prolific beyond all precedent ; and the quality of the article has varied according to the demands of fashion. At one time the gross and disgusting descriptions of Fielding and Smollett met the popular taste. Anon, what Hannah More calls the “non-morality” of the Great Unknown, was in excellent *gout*. And since that prolific fountain has been dried up, others, who, alas for the cause of virtue and religion, are too well known, have not failed to disgorge tales of all sorts, suited to every variety of appetite, from the most delicate and refined to the most gross and grovelling. For like the frogs of Egypt, these productions have not been confined to the *boudoirs* of the literati, nor to the centre tables and withdrawing rooms of wealth and fashion : but have found their way to the kneading troughs of the kitchen ; coming there, it may be, in one of those enormous products of the modern press, that might be mistaken for a winding sheet ; and which I fear has proved the winding sheet of many a noble intellect.

I am aware that not a few authors, disgusted with these perversions of fictitious literature, have made many praise-worthy efforts to turn its current into the channels of virtue and religion. Nor have they failed to obtain many interested readers. But I fear that in most cases it is the well arranged story, and not its moral, which has awakened interest :

“First raising a combustion of desire,  
With some cold moral they would quench the fire.”

But Leviathan is not so tamed. Yet the fact that the love of novelty is so strong naturally in the heart, shows us, that in some way or other, it was meant to be gratified. And when we learn that the wonders of nature far transcend the wonders of romance, is it not evident, that if men can be brought to love nature, and those branches of knowledge which unlock her Elysian fields, this desire can be fully satisfied with realities, without the aid of fiction. I have little hope that any success-

ful headway can be made against that morbid love of fiction, which has become the almost universal passion, until you can implant in man's heart a love of unsophisticated nature. This once done, and the fascinations of romance would become powerless under the overmastering influence of the new affection. To restore nature, therefore, to the throne of the heart, and expel the meretricious usurper, is the noble work that lies before the scholar of the nineteenth century. And when it shall be accomplished, as I doubt not it will be, and the deluge of fictitious literature, that now almost buries the civilized world, shall have passed into the limbo of forgetfulness, it will be found that a mighty barrier to the progress of true knowledge and true religion has been taken out of the way, and that the heart which is alive to natures beauties, is well prepared to love the God of nature, as well as the God of revelation.

It is not necessary to spend time in showing that rhetoric and oratory, two other important branches of polite literature, are capable of the same perversion to unworthy purposes, as the subjects already noticed. In every human heart there are chords, which, when struck by the silver bow of the rhetorician, or the magic wand of the orator, cannot but vibrate and give back a response. But when stormy passion, or reckless irreligion, sweeps over those chords, they return only discordant sounds, that grate harshly upon the ear of virtue and piety. But when they are touched by the delicate and skillful hands of true benevolence, the tones which they return, resemble the music of heaven; and they excite the spirit of heaven all around. To promote that spirit is doubtless the grand object to which the Creator intended the flowers of rhetoric and the strains of eloquence should be devoted. How immensely important, then, that Christian scholars should rescue these branches from the hands of the unprincipled and the wicked, and convert them to their legitimate use, as auxiliaries of virtue and religion!

Some worthy men, I know, look with a jealous eye upon the use of rhetorical and oratorical skill in aid of religion. They feel as if no attempt should be made to set off and recommend the naked truth. But as remarked by Dr. Campbell, how much better for the minister of the Gospel to write so as to make the

critic turn Christian, than to write so as to make the Christian turn critic ! How much deeper the effect, for example, upon every mind, could the advocate of religion in his descriptions, follow the rule so beautifully illustrated by Pope :

“ True ease in writing comes from art, not chance;  
As those move easiest who have learnt to dance.  
'Tis not enough no harshness gives offence;  
The sound must seem an echo to the sense.  
Soft is the strain when Zephyr gently blows,  
And the smooth stream in smoother numbers flows ;  
But when loud surges lash the sounding shore,  
The hoarse rough verse should like the torrent roar.  
When Ajax strives some rock's vast weight to throw,  
The line too labors and the words move slow.  
Not so when swift Camilla sconrs the plain,  
Flies o'er the unbending corn and skims along the main.”

What student has not felt the thrilling influence of the πολυφλοισθοιο θαλασσης of Homer ? Or still more to my purpose, how striking the contrast between the opening of the gates of Heaven and of Hell, as described by Milton :

“ Heaven opened wide her ever during gates,  
On golden hinges turning :————  
The infernal gates  
Wide open flew, on iron hinges turning,  
Grating harsh thunder.”

Now it is not in human nature to avoid receiving a powerful impression from such a skillful choice and collocation of words : and why should not religion avail itself of this means of giving truth a keener edge ? It may, indeed, be carried to excess ; as Dante seems to have done in his descriptions of the physical torments of perdition : but Milton, while he has given an awful distinctness and force to those same torments, has not exaggerated them : and why may not religion use this power, as any other proper means, to impress Divine truth ? In this respect, thus far, the children of this world have been wiser than the children of light.

In passing from literature to science, on the great circle of human knowledge, we meet with intellectual and moral philosophy. But so obvious is the connection between the latter and the principles of religion, that we need not delay upon its elucidation. For every theory of morals, that is not radically defec-

tive, makes the origin of moral obligation identical with that of religious obligation. So that in fact, moral philosophy is only one branch of natural theology. I regard politics, also, or the principles by which nations should be governed and regulated, as only a branch of ethics; or, rather as a special application of the principles of morality and religion: though I greatly fear, that expediency and self interest have thus far been the basis of political action more frequently than moral or religious principle. By some writers, intellectual philosophy, or psychology, or metaphysics, as they would rather choose to denominate the science, has been supposed, upon the whole, quite disastrous to religion. For when they consult ecclesiastical history, they find that the most fatal errors in religion have usually been based upon some false system of metaphysics; and that behind its hypothetical and unintelligible dogmas, the ablest sceptics have entrenched themselves. They regard "the modern philosophy of the human mind, for the most part, as a mere system of abstractions," "having almost nothing to offer of practical instruction;" and although "the philosophy of the agency of sentient and voluntary beings is a matter of rational curiosity,—it is nothing more."

I quote here, for the most part, the language of an able recent author. But admitting the truth of these statements, they show one thing at least; that unless theologians are familiar with the systems of mental philosophy, so ably defended by eminent men, how can they hope to expose and refute such men when they employ metaphysical subtleties to pervert religious truth? If the theologian does not display equal acuteness with the ontologist, the latter will triumph in his assaults upon religion. And if it be a false metaphysical philosophy, that has led a man to adopt a false religious creed, how important that the advocate of religion should be able to meet the errorist on his own ground, and not only to show him that he started wrong, but to put him upon the right track. "If it be a murky or misty region," says a late writer, "carry the blazing torch of demonstrated truth into every cloudy cave and den, encompass every fastness where error lurks, and pour in the fire of a burning logic. The surest way to get protection from the open, and especially the secret

ravages of a mischievous beast, is to hunt him down in his own lair.”\*

But it is said, that all experience shows that there is no safety save in keeping religion entirely aloof from metaphysics. What centuries of disaster followed the attempt of the ancient fathers to incorporate the metaphysics of Platonism with Christianity? And how much longer in the dark ages, did the pall of ignorance and a perverted Christianity rest upon the world, because it was held down by the Peripatetic Philosophy, resting on it like an incubus! In our own day, too, we have seen a glacial period commence, in a portion of the Church, from the freezing influence of German metaphysics; which threatens to be as long and as rigid as the analogous geological period.

Now were the question, whether it were better for men to receive with child-like confidence the declarations of the Bible, without reference to ontological systems, all probably would reply in the affirmative. But the difficulty is, that ingenious and speculative men will construct their philosophical strait jackets, into which they will force the doctrines of revelation. And when the friends of piety see that religion is panting and almost strangled by this cramping Procrustean process, how shall they liberate her? They must have help to do it; and denunciation and mere zeal will not bring help. They must show by a careful examination and measurement of the entire warp, and woof, and cut, of this philosophical dress, that however agreeable it may be to the latest fashion, it cramps the heart and the vitals, stops the circulation of the blood, and is shrivelling up the extremities; and then will all the friends of religion join in stripping off the murderous vestment. Do you suppose that the errors of Platonism, and the peripatetic philosophy would ever have been weeded out from Christian doctrines, except by men who had so thoroughly examined them as to be in no danger of plucking up the truth also? Who but metaphysicians could have exorcised that famous Plastic Nature, conjured from the “vasty deep,” by so powerful a necromancer as Cudworth? Who but men versed in the subtleties of dreamy abstractions, could have coped successfully with the Scottish prince of sceptics, when he had gathered a dense fog around him, and under cover of it had

\* Prof. Fiske's Address at East Windsor, p. 8.

assailed the first principles of all religion? Had Kant been unskilled in the abtruse speculations of mental philosophy, he could not so effectually have demolished the pantheism of Spinoza; and still more essential is such knowledge to show the fallacy of those more recent forms of the same doctrine, the natural pantheism of Schelling, and the idealism of Fichte.

Another effort of the German mind is to show that the argument from design, to prove the Divine Existence, as advanced by Derham, Ray, Paley, and the Bridgewater Treatises, is false; and that the idea of God is derived from a sort of intuition of the pure reason; nor could the external world possibly excite the idea of God. These opinions have gained not a little credence in this country; falling in, as they do, with what is called a spiritual philosophy, or transcendentalism. Now that there is a moral order in the world, and in the mind itself, and that the understanding, perceiving this, naturally infers that a Being of Infinite Moral Perfections must be the author of both,—because we instinctively refer every effect to a cause,—cannot be doubted. But on this view, this moral argument, as it is called, becomes only a single example of the argument from design; and by no means invalidates or supersedes other forms of the argument derived from the external world. Dr. Paley's argument was, indeed, defective; because he did not refer to mental philosophy to prove the spirituality of the Deity: But that defect is abundantly supplied by Chalmers, Crombie, and Brougham: so that now, the argument which Paley labored to establish, is impregnable; But it will require the vigorous efforts of men versed in abtruse metaphysics, to bring it out of the fog and dust with which it has been enveloped.

I have alluded to transcendentalism, dignified as it has been by the name of "spiritual philosophy," in distinction from the Baconian or inductive, which is called "sensuous." This is, also, a product of German metaphysics; and when one sees what an absolutely unintelligible jargon is used in its enunciation, by its ablest originators, such as Fichte, Schelling, and Hegel, he finds it difficult to conceive how it has exerted such an influence upon religion. But the fact is, there is always to some minds, especially in youth, a wonderful charm in a philoso-

phy that is esoteric. They love to believe themselves capable of discovering a hidden meaning in facts and principles, which the uninitiated cannot discover. Hence, let some man of real talents and learning, as Swedenborg for instance, solemnly and pertinaciously declare that he does "see what is not to be seen," and he will not want followers, who soon come to have a clear vision for double senses and spiritual meanings. Indeed, a man of talents has only to be obscure in his style and meaning, in order to be regarded by a large proportion of the world, and among them not a few recently fledged literati, as very profound. On the contrary, that beautiful simplicity and clearness of style and thought, which are the result of long and patient thought, and which characterize the highest order of talent, are regarded by the same class as evidence of a superficial mind and destitution of genius. Accordingly, the temptation is very strong with writers and public speakers, who would be popular, to wrap themselves in the mantle of mystery and obscurity; so that the remark of Dr. Griffin is too true, that the last attainment of the orator is simplicity: and we may say the same, also, in respect to the philosopher. But if men of talents will mount in the air balloon of metaphysical speculation, into transcendental regions of clouds and nebulae, and through their speaking trumpets announce the discovery of new worlds, unknown to the Bible or to science; Christian men must ascend after them, in a similar vehicle, bearing with them the torch of truth, to ascertain whether a fog bank has not been mistaken for a planet.

I have thus far spoken of the value of mental science as a necessary means of detecting religious errors, originating in the same science. But it has also many direct and important bearings upon religious truth. But did the time permit me to point them out, it would be little more than a repetition of what has been recently said better and more fully than I can do, by one of my colleagues.\* I pass, therefore, to another important sign in the great zodiac of human knowledge. On that circle mathematics follows naturally after metaphysics, because it furnishes us with the noblest examples of abstract truth in the universe.

But I fancy that I hear one and another whispering, "what possible connection can there be between mathematics and re-

\* Prof. Fiske's Address at East Windsor.

ligion?" The pure abstractions of this science do not, indeed, lead the mind directly to a Deity; since they may be conceived to be necessary and eternal truths. They are not the result of an induction from facts, but of a comparison of ideas. And it is the facts of the natural world that most strikingly discover to us the wonders of adaptation and design, and lead the mind irresistibly to infer a Supreme Being. But what is the basis on which most of this adaptation and design rest? Chiefly, I answer, the laws of mathematics. Look up to the heavens, and you will find those laws controlling all the movements of suns and planets with infallible precision. Every movement on earth, also, which is either mechanical or chemical, is equally dependent upon mathematical laws. Vital operations, too, so far as they result from chemical and mechanical forces, must be referred to the same principles. I do not assert that life and intellect are governed by mathematical laws: but their operations have all the precision of mathematics; and I doubt not could be predicted by angelic minds, certainly by the Deity, with as much certainty as the astronomer foretells an eclipse, or transit: and really I do not see but the same principles would guide the calculation in the one case as in the other. In short, so entirely dependent are the movements of the universe upon mathematical laws, that to alter or annul these laws, would be to restore the reign of chaos and old night. Let but a single axiom or corollary of mathematics be changed, and I doubt not that wild disorder and ruin would soon take the place of the adaptation and beautiful design that now meet us at every step. Mathematics then forms the very framework of nature's harmonies, and is essential to the argument for a God. Instead of having no connection with religion, it lies at the foundation of all theism.

It seems to me, also, that mathematics aids us in the conception of some religious truths, difficult from their nature to be conceived of by finite minds. All the attributes of the Deity, being infinite, are of this description. But the contemplation of an endless series in mathematics, gives us the nearest approach to an idea of the infinite, which we can attain. Follow the series, indeed, as far as our powers will carry us, and we are still

no nearer the end than when we started. But we have got hold of the thread, that would conduct us, if our Dædalian wings did not fail us, across that interminable abyss which separates the finite from the infinite; and when we transfer our mathematical conceptions to the Deity, we can hardly fail to meditate upon his glories with deeper amazement.

To many minds all explanations of the biblical doctrine of the Trinity, appear so absurd and contradictory as not to admit of belief. Let, it however, be stated to such a man, for the first time, that two lines may approach each other forever without meeting, and it will appear to him as absurd as the doctrine of the Trinity. But after you have demonstrated to him the properties of the hyperbola and its asymptote, the apparent absurdity vanishes. And so after the theologian has stated, that by Divine Unity he means only a numerical unity,—in other words, that there is but one Supreme Being, and that the Three Persons of the Godhead are one in this sense, and three only in those respects not inconsistent with this unity, every philosophical mind, whether it admit or not that the Scriptures teach the doctrine of the Trinity, must see that there is no absurdity or contradiction in this view of it. Hence it may happen, and indeed it has happened, that the solution of a man's difficulties on this subject may originate in a proposition of Conic Sections.

Other peculiar truths of revelation receive striking support from the application of mathematical principles. Among these is the doctrine of special or miraculous Providence. Professor Babbage, in that singular yet ingenious work, called the Ninth Bridgewater Treatise, has shown mathematically, that miracles may have formed a part of the original and foreordained plan of the universe, and that their occurrence may be as really the result of natural laws as ordinary events, a doctrine, which, indeed, had been previously advanced by Butler. And in this way is the famous objection of David Hume to miracles proved by mathematics to be groundless.

Other religious applications of mathematics might be pointed out. But we must hasten forward to that wide space on the circle of human knowledge, occupied by the inductive sciences.

These comprehend, in fact, all those branches that relate to the material universe, and when we have glanced at them, we shall have completed the circuit of literature and science.

And here at the outset, we remark, that from these sciences have been gathered that great mass of facts which constitute the essence of Natural Theology, by such men as Newintyt, Ray, Derham, Wollaston, Paley, Brown, and the authors of the Bridgewater Treatises. The *a posteriori* argument for the Divine existence rests upon them; and, indeed, almost all the truths pertaining to the character of the Deity and his government that nature discloses. They are arguments which all men can readily understand and appreciate: for although a few metaphysical minds have endeavored to throw doubt over the validity of the argument from design, as I have already stated; yet this is in fact the only evidence that does interest and satisfy the great mass of men. When they see such wonderful effects as physical science discloses, they are led irresistibly, by a universal law of the human mind, to refer them to some adequate cause; and no cause can be adequate, save an Infinite Deity. Natural Theology has selected only the most striking of these effects. But in truth every fact of inductive science furnishes an argument for theism. So that to a man in a morally healthy state, every scientific truth becomes a religious truth, and nature is converted into one great temple, where sacred fire is always burning upon the altars, where hovers the glorious Shekinah, and where, from a full orchestra, the anthem of praise is ever ascending.

In accordance with this view, we find that the most gifted minds, and indeed a large majority of all minds, that have devoted themselves to inductive science, have been the friends of religion. And here we reckon the princes of the intellectual world, such as Newton, Kepler, Galileo, Pascal, Boyle, Copernicus, Linnaeus, Black, Boerhaave and Dalton: and among the living, such men as Herschel, Brewster, Whewell, Sedgwick, Owen, and a multitude of others. The very same argumentation that leads such original discoverers to derive the principles of science from facts in nature, carries them irresistibly backward to a First Cause: and, indeed, the inductive principle, as

developed by Bacon, forms the true basis on which to build the whole fabric of natural religion ; and he who fully admits the truth of natural religion, is in a state of preparation for receiving revealed truth, to supply its deficiencies. So that upon the whole, the inductive sciences are of all others most favorable to religion, and the most intimately connected with it.

I shall doubtless be met here by the objection, that not a few distinguished men, found in the ranks of inductive science, have been thorough sceptics. And here the names of some of the most able mathematicians of modern times, such as La Place, and D'Alembert, will be adduced. We shall be referred to the Nebular Hypothesis of the former, and to the Encyclopedia of the latter; both of them intended to lay the axe at the root of all religion, and to cover nature with the pall of atheism. But such anomalies as these are explicable in consistency with the general position that inductive science is eminently favorable to religion. For in the first place, these men were atheists in spite of science, rather than through its influence. The spirit of the times, and of the country in which they lived, was dissolute and atheistic ; and the moral feelings of D'Alembert at least, were so corrupt that nothing but atheism could keep conscience quiet. In the second place, they were distinguished in abstruse mathematics, rather than in inductive science : and it cannot be denied, that when men devote themselves almost exclusively to abstractions of this nature, they are apt to look with suspicion upon the less certain, but far higher and more important evidence of moral reasoning : or rather, they attempt to apply the subtleties of the higher mathematics to religion, and of course fail of arriving at correct results : because the subjects are totally diverse, and must be understood by entirely different modes of analysis. Bonaparte, who was quick to discover character, made La Place one of his ministers : but soon saw that he did not discharge his duties with much ability ; because as the emperor said, "he sought subtleties in every subject, and carried into his official employments the spirit of the method of infinitely small quantities," employed by mathematicians. But the grand difficulty with such men is, that by confining their attention so exclusively to one department of knowledge, and to the cultivation of one

set of faculties, by a well known law of physiology they dwarf all the other powers, and really become less capable of judging of other subjects than ordinary men, who cultivate all their faculties in due proportion. This is strikingly exhibited in the Nebular Hypothesis of La Place. He really thought that it rendered a Deity unnecessary in the formation of the universe. But the merest tyro in moral reasoning sees, that even admitting the hypothesis, a designing, infinitely wise, and powerful Deity, is just as necessary as without it. It only throws farther back the period when this designing and creative interposition was exerted: and even the Christian philosopher feels no difficulty in adopting this hypothesis, through fear of its irreligious tendency. The fact is, that La Place, though a giant in mathematics, was only a liliput on other subjects. It ought not to be forgotten, also, that neither of the eminent infidel mathematicians, whom I have named, were original discoverers, like Newton, Copernicus, and Boyle. In making their discoveries, these latter men were led to take broad views of science, and to examine the original as well as final causes of events: whereas such men as La Place and D'Alembert, only carried out and illustrated the principles discovered by others. In tracing out these illustrations, they did, indeed, discover amazing acuteness: but their views were so much confined, that they were but poor judges of the relations of science to religion. They were excellent mathematicians, but poor philosophers. For in the noble language of Sir John Herschel, one of the brightest living ornaments of inductive science in Europe, "the character of the true philosopher is, to hope all things not impossible, and to believe all things not unreasonable." But the character of these men would be better described by saying, that they doubted and denied every thing that could not be proved by mathematics. They are examples of malformation and distortion in the philosophical world, instead of fair proportion and full developement.

There is another circumstance which has deepened the impression that the inductive sciences are, to some extent, unfavorable to religion. Scarcely any important discovery has been made in these branches, that has not been regarded for a time,

either by the timid and jealous friends of religion, or by its superficial enemies, to be opposed at least to revelation, if not to theism. When Copernicus demonstrated the diurnal and annual revolutions of the earth, the infidel saw clearly that the facts were in opposition to the Bible; and the theologian was of the same opinion, and arrayed scripture authority, as well as compact syllogisms, against the new astronomy. But the Christian soon learnt that he had misunderstood the language of the Bible, because he had read it through the medium of a false astronomy. So too, when the Brahminical astronomy was first brought to light, and the epoch of the Tirvalore tables was thought to be nearly as early as the Mosaic date of man's creation, scepticism began to exult. But the tone changed when it was ascertained that this epoch was supposititious. More recently, French infidelity saw in the Zodiac of Denderah a refutation of the biblical chronology. But when it was ascertained that the position of the signs on that Zodiac, in respect to the colures, had reference to the commencement of the Egyptian civil year, and not to the precession of the equinoxes, this fancied discrepancy also vanished: and now, when both biblical interpretation and astronomy are better understood, every one confesses, not only that the science is in harmony with revelation, but that it affords some of the most splendid illustrations of religion to be found in the whole circle of learning.

When at the beginning of the present century, the great discovery was announced, that the principal part of the solid materials of the earth had been oxidized, or in popular language, had been burnt, both the baptised and the unbaptised infidel at once declared, that the final destruction of the earth, as described by Peter, was impossible: since it is no longer combustible: and since the apostle had thus erred, because not acquainted with modern chemistry, the idea of his inspiration must be given up. It was ere long found, however, that the apostle's language had been misunderstood, through the influence of the false opinion, still widely entertained, that to burn a substance is to destroy or annihilate it. But when chemistry showed that combustion only changes the form of substances, and cannot annihilate a particle, the apostle's meaning was

found perfectly to correspond to such an idea : and it is now obvious, that he meant to teach simply, that whatever upon or within the earth is combustible, will be burnt ; and the whole mass of the globe be melted. So that now the tables are completely turned ; and we find, not only no contradiction between his language and chemistry, but a striking proof of its inspired origin, in the fact, that though written when chemistry was not known, it should be found in perfect harmony with the researches of that science. And the same remark may be applied to the whole scriptures in their relation to all science.— The most eagle eyed sagacity of the nineteenth century has been unable to detect a single discrepancy between the two records. The same cannot be said of any false religion. The Shasters of Hindostan contain a false astronomy, as well as a false anatomy and physiology, and the Koran distinctly avows the Ptolemaic system of the heavenly bodies ; and so interwoven are these scientific errors with the religion of these sacred books, that when you have proved the former you have disproved the latter. But the Bible, stating only facts, and adopting no system of human philosophy, has ever stood, and ever shall stand, in sublime simplicity and undecaying strength ; while the winds and the waves of conflicting human opinions, roar and dash harmlessly around, and the wrecks of a thousand false systems of philosophy and religion are strewed along its base.

But the religious applications of chemistry do not consist simply in illustrating a passage of scripture. It abounds with the most beautiful exhibitions of the Divine wisdom and benevolence : and notwithstanding the ingenious developments by Prout, in his Bridgewater Treatise, and by Fownes in his Prize Essay, I must believe that this field is only just entered ; and that most precious gems will be found in almost every part of its wide extent. What admirable skill and benevolence does the doctrine of definite proportions and atomic constitution in chemical compounds present ! Here we see nature incessantly performing processes, on which organic life and comfort depend, with a practical mathematics as perfect as the theory.— And then, how wonderful is the isomeric constitution, recently

discovered, of those proximate principles that form the food of animals and plants. How beautiful too, the mode,—only recently ascertained,—by which this nourishment is brought within their reach, and introduced into their systems! See too what wonderful benevolence as well as wisdom are displayed in the laws and operations of heat, by which its very excess in tropical regions, produces by evaporation the paradoxical result of cooling and rendering habitable that burning zone: and on the other hand, the congelation and condensation produced by its absence in frigid regions, renders the atmosphere warmer and the climate habitable. Think, also, how in the case of water, by an apparent exception to a law of nature, just as it enters into a state of congelation, the great bodies of that liquid in our rivers and lakes are prevented from freezing up in the winter, so that the longest summer would not thaw them out. And finally, what substance in nature is so wonderfully adapted to its manifold and seemingly opposite uses, as water!

Simple though it seem,  
Emblem of imbecility itself,  
As most regard it, yet in fact, the food  
Of all organic life; the fruitful source  
Of power in human arts; and in the clouds,  
The storm, the mountain stream, the placid lake,  
The ocean's roaring and the glacier's sheen,  
The landscape's frostwork, or its icy gems,  
Hence springs the beautiful and the sublime.  
A power, indeed, pervading nature through;  
Now moving noiseless through organic tubes,  
To keep stagnation from the vital frame;  
And now the Atlantic dashing to the skies,  
Or rushing down Niagara's rocky steep,  
Earth trembling, staggering, underneath the shock:  
Effects so diverse, opposite, to gain  
By one mild element, a problem this,  
No wisdom, short of infinite, could solve.

No sciences have furnished so many and so appropriate facts, illustrative of natural theology, as anatomy and physiology.—They have been the great magazine, whence writers on that subject have drawn their most effective weapons in their war with atheism: but being so fully described in so many treatises, I need not enter into particulars. Comparative anatomy and physiology, however, of more recent date, have not yet been so extensively employed for religious illustration as they will be:

although Bell's Bridgewater Treatise upon the hand, affords us a foretaste of what may be done. The developments of these sciences are truly marvellous. Who would have believed, for instance, fifty years ago, that such is the mathematical correlation, not only of different parts of an animal, but of parts of different animals, that from a single fragment of the bone of an unknown creature, the skillful anatomist can construct his whole skeleton, and then clothe it with muscles, blood vessels, and nerves, and point out its food, its habits, and its haunts. Yet this has been done in many instances ; and the subsequent discovery of the whole skeleton has confirmed the accuracy of the principle employed, and the results obtained. What a striking proof of the existence and agency of a Being infinitely wise and powerful, to contrive and create the universe ! For in fact, we find that the correlation of animal structures, so beautifully developed by Cuvier, Owen, and others, is but a specific example of the great law of harmony, that links together by a golden chain, the great and the small, the past, the present, and the future, throughout the universe.

The science of physiology, however, has often been looked upon with jealousy by the friends of religion, as leading its votaries to materialism. It would not be strange, indeed, if men, who see such astonishing effects result from exquisite material organization, and who give but little attention to the functions and laws of intellect, should come to think it possible that even thought may be only a result of that organization. But the difficulty lies, not in the science, but in these partial views : in that common failing of literary men, to attempt to group every thing under a favorite science and explain every thing by it. And further, when I find even professedly Christian men defending materialism, and some of its ablest advocates admitting that the soul may be something "immortal, subtle, immaterial, diffused through the brain,"\* (I use their very words,) I cannot believe that the views of such men as to the nature of the soul, differ much in reality from those of the strict immaterialist ; although they use different terms. Nor will the practical influence of their opinions, false as they undoubtedly are, when understood in their strict sense, be like-

\* Elliotson's Physiology, p. 39.

ly to be very disastrous: although there is a grosser form of materialism, that is made the basis of a hateful system of atheism.

There are two recent offsets from Physiology, which have been supposed fraught with influences unfavorable to religion. I refer to Phrenology and Mesmerism. The first has been thought to favor materialism, and to lessen human responsibility; and the latter, to bring miracles into disrepute; and to direct us for the cure of the body and the soul, to a class of dreaming pretenders, whose responses are about as much to be relied on as those of the oracle of Delphos, the god of Ekron, or the witch of Endor; and whom it is about as impious to consult. The merits of these new branches of science, this is not the proper occasion to discuss; nor is it easy as yet to ascertain definitely what principles in them are settled. But admitting their pretensions, the first seems to leave the question of materialism just where it found it; since it is as easy to see how an immaterial soul should act through a hundred organs as through one. Nor does it seem to me more difficult, on natural principles, to see how the mind may act at a distance, through the undulations of a mesmeric medium, than to see how light and heat are transmitted by the waves of a luminiferous ether. On the other hand, if physiology and phrenology tend to materialism, certainly mesmerism tends even more decidedly to immaterialism; as the conversion of several distinguished materialists will testify. It does, also, open to the Christian, (admitting its statements to be true,) most interesting glimpses of the mode in which the mind may act when freed from flesh and blood, and clothed with a spiritual body. Indeed, I doubt not, that in regard both to Phrenology and Mesmerism, the general principle will prove true, that the more ominous of evil any branch of knowledge seems to be, in its incipient state, the more prolific it will ultimately become, in illustrations favorable both to morality and religion.

The wide dominions of natural history, embracing zoology, botany, and mineralogy, the theologian has ever found crowded with demonstrations of the Divine Existence and of God's Providential care and government; and every new province that has

been explored by the naturalist, only serves to enlarge our conceptions of the Creator's works, and to impress us more deeply with their unity and perfection. These new conquests in unknown regions have been astonishingly numerous within the last half century: but in the direction pointed out by the microscope, they have been most marvellous: The existence of animals too minute to be seen by the naked eye, has, indeed, long been known: but it was not till the researches of Ehrenberg, that any just conceptions of their infinite number and indefinite minuteness were entertained. We now know, that nine millions of some of these animalcula, may live in a space not larger than a mustard seed; and that their numbers are many million times greater than that of all other animals on the globe. Indeed, the microscope has laid open a field into the infinitesimal forms of organic and inorganic nature, quite as boundless, both in number and extent, as the telescope discloses in infinite space. Nor can we find any limits in the one direction more than the other: and thus does the microscope in the same manner as the telescope, prodigiously enlarge our conceptions of the perfections of the Infinite Author of the Universe.

These researches have cast not a little light upon a certain hypothesis, that has been, in one form or another, often thrown before the world, since the days of Democritus and Epicurus, usually for the purpose of sustaining a system of atheism. It supposes an inherent power in nature, capable of producing plants and animals without parentage, by an imagined vital force, essential to some forms of matter. The ancient philosophers imputed these effects to a "fortuitous concourse of atoms." In modern times this general statement has been made more definite by Lamarck, Geoffroy, St. Hilaire, Bory St. Vincent, and others, who suppose that Nature,—in their vocabulary sometimes dignified by the title of Deity, but still unintelligent and merely instrumental,—gives origin only to "monads," or "rough draughts" of organic beings; and that these, by "an inherent tendency to improvement," and "the force of external circumstances," become animals of higher and higher organization; until at last the orang-outang abandoned his quad-

rupedal condition, and stood erect as man, with all his lofty powers of intellect. Before the invention of the microscope, a multitude of insects and worms were thought to have this equivocal origin, and to pass through these transmutations; an example of which, every Latin scholar will recollect, in the directions of Virgil for the production of a swarm of bees out of the carcass of an animal. But as optical instruments have been improved, and observations have become more acute, the origin of nearly every animal visible to the naked eye, has been found to be by ordinary generation. The advocates of the spontaneous production of organic beings, however, still clung to the animalcula and the entozoa. But it is now clearly demonstrated, that all the former class have been derived from parents; and that more abundant means are provided for their reproduction than for any of the higher tribes of animals. The same is true of the entozoa: a single individual of which, is capable of producing more than sixty millions of progeny; and it would be very strange for nature to take such extraordinary pains for their propagation, if it might have been accomplished spontaneously. Not a single certain example, indeed, of the spontaneous production of living beings can be adduced: and if there are a few cases where parentage has not been yet discovered, the past history of the subject makes it almost certain, that it needs only more perfect instruments, or more extended observations, to prove that the same great law of reproduction embraces all animated nature. And as to the transmutation of species, geology has shown that it has never taken place; while physiology demonstrates that species are permanent and can never be transmuted. The individual does, indeed, pass through different stages of development; some of which resemble the perfect forms of species inferior to it in the organic scale. But the limits of these developments are fixed for each species; nor is there a single known instance, in which an individual has been able to stop at any particular stage, and thus become another species.

In view of these facts, it is not strange that most of the men best qualified to judge on such a subject, as for instance, Owen, the ablest of comparative anatomists; Ehrenberg, the first of mic-

roscopists; and Muller, most eminent in physiology, should reject these hypotheses of spontaneous generation and transmutation. Nevertheless, the unusual interest which has been manifested by the recent work of an English nobleman, entitled, *Vestiges of the Natural History of the Creation*, wherein these hypothesis, as well as the nebular hypotheses, are ingeniously defended, and that too without denying the original intervention of a Divine Power in nature, show us that a long drawn contest is yet before naturalists on these subjects, ere these fancies shall be forced into that extramundane receptacle of things abortive and unaccomplished, described by Milton as "a limbo large and wide," on the back side of the moon. And yet, my conviction is, that this contest will not have so important a bearing on the cause of religion, as some theologists imagine. For even though these hypotheses should be established, an intelligent, spiritual, infinite Deity, is quite as necessary to account for existing nature, as on the more common theory, which supposes the universe commanded from nothing at once in a perfect state. Indeed, to endow the particles of matter with the power to form exquisite organic compounds, just at the moment when circumstances are best adapted to their existence, and then to become animated, nay, endowed with instincts, and with lofty intellects; all which results the advocates of these hypotheses must impute to the laws impressed upon originally brute matter,—such effects, I say, demand infinite wisdom, power and benevolence, even more imperatively than the common theories of creation. I doubt not that in general these hypotheses have been adopted to sustain atheistic opinions, or to remove the Deity away from his works. But unbiased philosophy sees that they utterly fail to accomplish either of these objects. And I confess, that I reject them, more because they have no solid evidence in their favor, than because I fear that they will ultimately be of much injury to religion; especially so long as such works as Whewell's "*Indications of the Creator*," are within the reach of the scholar.

The religious bearings of geology alone remain to be noticed. And no science, except perhaps astronomy, has excited so much alarm as this, for its supposed irreligious tendencies. But so soon as theologians discovered, that while the Mosaic chronolo-

gy fixes the date of man's creation, it leaves the antiquity of the globe unsettled, and, therefore, a fit subject for philosophical examination, they began to see that this science might be made to shed much light upon religion. Indeed, it already excels every other science in the importance of its religious applications; and notwithstanding the noble beginnings by Dr. Buckland, Dr. J. Pye Smith, Dr. Chalmers and others, the work of developement is but just begun. Would that my time and your patience might permit us to take a leisurely survey of this interesting field. But a glance must suffice.

To say nothing of the illustrations of the meaning of revealed truth derived from this science,—of collision between them there is certainly none,—it furnishes us, in the first place, with a new argument for the existence of a Deity. This argument rests upon three leading facts of the science, independent of one another; so that we may doubt or deny one or two of them, and yet not reject the argument. The first is, that there was a period, when no animals or plants existed on the globe, and, therefore, an epoch when they were created; which must have required a Being of Infinite Perfections. The second is, that there have been on the globe several nearly entire extinctions and renewals of organic life, each of which demands the agency of such a Being. The third is, that man was only recently created,—almost the last of the animals:—and since he is at the head of creation, nothing in nature has demanded a higher exercise of wisdom and power than his production: and, therefore, it must have required a Deity.

It is obvious that these same facts prove clearly the non-eternity of the present condition of the globe; and even though we admit the ancient doctrine of matter's eternity, yet its most important modifications, requiring a Deity no less than its creation, must have been produced in time, and this conclusion is all that is essential to theism. And thus geology, which has been supposed to favor the idea of the world's eternity, is the only science, as Dr. Chalmers has splendidly shown, that can prove its non-eternity.

These same facts, and others that might be named, demonstrate the occasional interference of the Deity with the settled order of nature:—in other words, they show us splendid mira-

cles of creation. And thus is all presumption against the miracles of revelation done away:—and also all objections against special Providence and special answers to prayer.

This science too, opens to us views into the arcana of past duration, as deep and illimitable as astronomy does into the arcana of space; and there is made to pass before us a splendid panorama of the vast and varied plans of Jehovah; while chemical change is disclosed to us as the great conservative and controlling principle of the universe, superior even to the laws of gravitation. The unity of the Divine plans, is, also, exhibited to us by the records of this science, on a far wider scale than the existing economy of nature can show. And finally, it brings before us a great number of new and peculiar proofs of Divine Benevolence, that throw new glory over this attribute of the Deity; derived, as they are, from facts heretofore supposed to prove Divine malevolence, or at least vindictive justice.

We have now taken a glance at the entire and vast circle of human learning. And is not every mind forced irresistibly to the conclusion, that every branch was originally linked by a golden chain to the throne of God: and that the noblest use to which they can be consecrated, and for which they were destined, is to illustrate his perfections and to display his glory.—If so, let me conclude my too protracted remarks, by a few inferences.

In the first place, what a monstrous perversion and misapprehension of learning it is, to consider it as hostile to religion.

It is not difficult to explain how a Christian, who is very ignorant, and who learns that literary men are often sceptical, should distrust the influence of learning upon religion: nor how a mere smatterer in science, himself sceptical, should flatter himself that his great learning made him so. But how strange that any talented and well informed man, be he Christian or infidel, should not see that all science and a large part of literature are

But elder Scripture writ by God's own hand!

It must be the strongest prejudice, or the most decided ha-

tred to religion, which can suppose that one work of the same infinitely perfect God should oppose another : for in fact, learning and religion are only different shoots from the same parent stock : and if their fruit be of opposite qualities, it must be because man has grafted upon one or the other, the apples of Sodom. To set learning against religion, is as unnatural, as to array brother against brother on the field of combat.

We see, secondly, that those engaged in directly promoting religion, and those devoted to learning, ought to look upon each other as laboring in a common cause.

If their labors are such as they should be, they will help each other ; and, therefore, they ought to rejoice in each others success. For though a new branch of learning but half understood, may sometimes put on an aspect threatening to religion, we need never fear but the final result will be a new support to religion ; and, therefore, the religious man should dismiss all fears and jealousies in respect to sound learning ; while on the other hand, every increase of true religion has an auspicious bearing upon the cause of learning.

We see, thirdly, that the preacher of the Gospel may consistently devote himself to the work of instructing the young in literature and science. For in the first place, he need not, by such a change, necessarily abandon the direct preaching of the gospel occasionally. In the second place, by faithful instruction in learning, he may greatly promote the cause of religion, and train up many, perhaps, to exert a still wider influence in its favor. Finally, how much better that such a man should use science and literature legitimately for the support of religion, than that they should be perverted by a sceptical teacher to undermine it. In spite of these reasons, however, we are frequently told, that for a minister of the Gospel to become a teacher of human learning, is to abandon his high calling, and forfeit his solemn vows ; as indeed he may do, by engaging in such pursuits from merely secular motives.

In the fourth place, we see that the more eminent a man is for learning, the more eminent he should be for personal piety. Why, indeed, should not the latter increase in his heart, as the former does in his intellect ? For every new accession

of knowledge is but a development of some attribute or plan of the Deity. The entire field of human learning all rightfully belongs to religion, and should be regarded by the Christian scholar as consecrated ground. The farther he advances in it, the more does he see of the Deity; and as he returns from communion with nature, in the very holy of holies of her temple, he ought, like Moses from the holy mount, to show a radiant glory on his countenance.

In the fifth place, what importance does the subject give to the pursuits of learning, and the Institutions of learning!

If knowledge is power in secular matters, it is no less so in religion. I know that a higher power is essential to the success of the latter. But I know too, that religion without learning almost infallibly degenerates into fanaticism or dead formalism; and, indeed, at this day, true religion will not flourish except in connection with learning: and, therefore, almost every denomination is now striving to found and sustain literary seminaries. Nor is their importance yet duly estimated, because but few realize how indispensable is their agency in promoting the noblest of all objects, the salvation of men; and, therefore, in our land at least, with a few exceptions, their foundations are too narrow and the superstructure too frail.

In the sixth place, how justly are those honored, and how wide an influence do they exert, who found and endow literary institutions from religious motives.

They may be charged with unhallowed ambition, by men who think only of the secular influence of these institutions. But he who considers what is the highest use of learning, and how immense will be the influence of a well endowed Seminary upon the cause of religion, cannot but look upon such bequests as the noblest of charities; especially when he remembers how much more enduring is that influence than when money is given to most other benevolent objects. What names stand higher on the Christian's roll of fame, than those of Harvard, and Yale, and Dartmouth, and Williams, and Brown? And through how many coming centuries of our country's history, will their example stimulate others to go and do likewise. By liberal bequests to literary institutions while yet feeble and struggling for

existence, their names have become inseparably fixed upon them, where they will remain long after the pyramids of Egypt shall be crumbled into dust. In what other way could they have exerted so desirable, extensive, and enduring an influence upon the world !

In the seventh place, what a noble yet immense work lies before Christian scholars : viz. to make all learning subservient to its highest purpose !

Sadly have many branches been perverted, and strong is still the disposition to divert all learning from its noblest use. To arrest this downward tendency, and to bring back all literature and all science to the service of religion, is an object of the highest ambition, adapted to call forth the strongest efforts of every Christian scholar. And let all such take courage. For religion is the natural home of all branches of learning : and though some of the sisterhood have been seduced into the service of sin and the world, and have forgotten their paternity, yet when reminded of their sacred origin, gladly will they return to the paternal hearth, and pile richer gifts upon the altar, where they presented their earliest offerings.

In the eighth place, we learn how important it is, that every literary institution should make the promotion of religion the leading object of its system of instruction.

Other objects of subordinate importance it may and ought to endeavor to accomplish : but to make these the chief things aimed at, while religion is thrust into the back ground, is as if a man should build an elegant mansion for the sake of improving the landscape, and with no intention of living in it : or as if a community should erect a church for the sake of holding town meetings and political caucases in it, and hearing lyceum lectures, with no intention of using it as a place of worship, except perhaps occasionally.

There is, indeed, a great cry about excluding sectarianism from our literary institutions, and throwing them open to persons of all religious opinions. Now in this country, where we have no established church, it is difficult to define a sectarian, unless it be a man who differs from us in religious sentiments. So that in fact, with the exception of a few, who have no opin-

ions or care on this subject, we are all sectarians ; and to exclude sectarianism from a literary institution, is to exclude all religion from it. And such is usually the result, when it attempts so to trim its course as to suit all parties. But really, of all kinds of intolerance, that is the worst, which is furious for toleration : and that the worst kind of sectarianism, which is fierce for irreligion. The only truly liberal and manly course for an institution to adopt, is, openly to avow its creed, and not to disguise its desire to have all the youth adopt it who resort thither ; while at the same time it uses no other means but argument and example to convert them, nor permits their religious opinions, whatever they may be, to have any influence in awarding literary honors. In this respect the motto of the ancient Tyrian queen should be adopted by every teacher :

*Tros Tyriusve nullo discrimine mihi agetur.*

Such a course does, indeed, make the institution sectarian ; that is, it shows a preference for some particular system of religion. But it is an honest course, and the only honest one that can be taken. For if an institution professes to regard all religious opinions with equal favor, who can avoid the suspicion, that it is either a stratagem for introducing some unpopular system, or that it indicates an almost universal scepticism on the subject. Indeed, how can a man, who has any just sense of religious obligation, consent to be placed in circumstances, where he cannot recommend openly those religious views which he deems essential to salvation ?

In the ninth place, we see that a Professorship of Natural Theology, is an appropriate one in a College.

The main business of such a professor, is to go over the same ground as we have now glanced at, and to trace out the bearing of all literature and all science upon religion. And if this be, indeed, the most important use of learning, why should it be left unprovided for ; or depend upon the voluntary efforts of the different instructors, whose hands are already quite full ? I make these remarks, because such a professorship is unusual in our Colleges ; and I have feared that the one with which I have been recently honored, may seem to have been

got up for the occasion, to eke out a deficiency of titles. But it is not so: and it is proper to say, that I have in fact, for the last ten years, attempted to perform the duties of such a professorship.

Finally, to the principle which I have endeavored to prove, we owe the establishment of many modern literary and scientific institutions; and eminently of that within whose walls we are assembled.

By recurring to the history of the origin of some of the most distinguished scientific societies and literary institutions of Europe, it will appear that one of the leading objects which their illustrious founders had in view, was to extend a knowledge of the Christian religion, along with the arts and sciences, to remote and barbarous nations, particularly those of the southeastern Asia. Among the institutions thus originating, was the Royal Society of London, the French Academy, the Berlin Academy, the Academia Naturæ Curiosorum, the University of Halle, and the Institutions of Franke at Halle; and among the distinguished men who have labored in this work, we find the names of Boyle, Montucla, Leibnitz, Wolf, and Humboldt.\* I fear, indeed, that this object has been often lost sight of by these institutions: but their origin furnishes us at least with the testimony of most able and competent witnesses, to the truth of the position which I have now vindicated and illustrated, as to the highest use of learning.

But to come nearer home: we shall see that this Institution originated in a deep conviction of this same truth in the minds of those noble hearted men, who in faith and prayer, laid the foundations on which we are called upon to build. The very first paragraph of the Constitution, of what they then called a Charity Institution, contains it; and in the first article it is said: —“ In contemplating the felicitous state of society, which is predicted in the Scriptures of truth, and the rapid approach of such a state, which the auspices of the present day clearly indicate: and desiring to add our feeble efforts to the various exertions of the Christian community for effecting so glorious an

\* *Oratio in Academia Fridericana Halensi &c. habita ab. D. J. S. C. Schweigger, p. 4,*  
Halle 1834.

event,—we have associated together for the express purpose of founding an Institution on the genuine principles of charity and benevolence, for the instruction of youth in all the branches of literature and science usually taught in Colleges." Here we see no other reason assigned for founding the Institution but a wish to promote the cause of religion ; as if no other benefits to result from it were worth naming. Let this fact never be forgotten by those who manage and instruct in this College. God forbid that the time should ever come, when any instructor here shall be ashamed, or backward, to acknowledge that the advancement of pure religion,—even the Christian religion,—is the grand object for which he labors and makes sacrifices.

Being called to-day to occupy a new position in respect to this College, it is natural to attempt to define that position somewhat ; and to inquire what there may be in the condition of the Institution to discourage, and what to encourage, for the future.

It is well known, that an impression prevails abroad extensively, that the College is in a state of severe depression, and struggling for existence. And to some extent this impression is correct. But to omit minor causes, the grand source of our embarrassments is not well understood. It is a deficiency of pecuniary means. There is no complaint that we send forth men of corrupt principles, to contaminate the community ; nor that they are deficient in scholarship, in comparison with graduates from other Colleges. If this were the case, we should hear of it from our theological, medical, and legal seminaries. But for want of means, we cannot add to our libraries and apparatus those literary and scientific luxuries, that render such an Institution attractive to youth ; nor can we give to our buildings and our grounds that beauty and picturesque elegance, which throw a charm around them in the eyes of the student. The result is we cannot offer those external attractions, which other excellent institutions of ample pecuniary means present, and our numbers have diminished ; though other causes, which I have not time to mention, growing in part out of the altered condition of the country, have tended to the same result.

Now why is it that we are thus stinted in our pecuniary means? Not because an enlightened Christian public have not

been generous in their benefactions ; but for two other reasons. In the first place, the unusual prosperity of the College in its earlier days, compelled the Trustees to provide more ample means than were subsequently needed ; and thus they incurred debt. But the grand reason is, that the College has never received any pecuniary aid from the State Government. Nay, it has been obliged to expend its hundreds to obtain even that modicum of justice, a charter. Now to establish itself without such aid, has been the lot of no other College in the State ; and I believe of none in New England, unless it be Brown University. Nor can such as have been thus endowed,—and liberal has been the governmental patronage towards those in Massachusetts,—imagine how hard and how long the struggle is, to carry up a College to the elevation needed in the nineteenth century, and in New England, by individual patronage alone.

But Amherst College has had an opportunity nobly to revenge herself for this act of injustice and neglect of her unnatural step-mother ; and the Commonwealth may be assured that we are filling other vials of vengeance, which we mean annually to pour out upon her head. More than one hundred of the regularly educated ministers of the Gospel in Massachusetts, are the graduates of this College ; and quite as large a number probably in the other learned professions ; for all our graduates amount to more than seven hundred. Thus has the College followed the directions of the Persian poet ; or rather, of one far greater than Hafiz :

“ Learn from yon orient shell to love thy foe ;  
And strew with pearls the hand that brings thee woe,  
Free, like yon rock, from base vindictive pride,  
Emblaze with gems, the wrist that rends thy side.  
Mark where yon tree rewards the stony shower,  
With fruit nectarous and the balmy flower.  
All nature cries aloud, ‘ shall man do less  
Than heal the smiter, and the railer bless ? ’ ”

But I would not be severe. For one thing at least we sincerely thank the Government. Without an exception, the gentlemen whom they have designated as Trustees, have entered cordially and efficiently into the work of building up this Institution, and of relieving it of its embarrassments ; and we could not have done without them. In sending us such men, the Government have

exhibited the true spirit of those who sit in the seat of the pilgrims. And in refusing that pecuniary aid, which they have bestowed upon other Institutions, I am willing to believe that prejudice has for a time stifled the truly liberal spirit of Massachusetts, and that we, or our successors, shall find that our rulers will never allow this refusal of aid to individual effort in promoting the cause of learning, to become a part of our permanent history.

I might have alluded to another cause of our pecuniary embarrassments. The truly devoted men, who commenced the Institution, in their single hearted zeal to aid those indigent pious young men, who were aiming at the Christian ministry, directed all their efforts to obtain a fund for that purpose : and they succeeded nobly : for that fund now amounts to \$50,000. But it can be used only for such students ; and, therefore, assists the College only by attracting such young men within its walls. In the mean time, they raised no funds for the general purposes of the Institution, save for buildings and apparatus ; and no such funds, worth naming, now exist, which are for the present available. They forgot themselves in their efforts to aid others ; or rather, to advance the cause of religion.

Our poverty, then, lies at the foundation of most of our embarrassments: and though this may be as trying, it is far less humiliating, than if the cause were criminal ; for unavoidable poverty is no crime, but often the parent of many virtues. Let us now turn the tables, and see whether there are any bright spots in the condition of the College.

In the first place, I am so puritanical in my notions, as to regard the fact ominous of good, that the foundations of the Institution were consecrated to the cause of pure religion, by men eminent for faith and prayer. Most of these men are now beyond the reach of human praise, or censure ; and, therefore, I may thus speak of them. But some of us remember their prayers, and sacrifices, for this object ; and we believe that all such prayers will, in God's time, have an answer. These men and their efforts have, indeed, been ridiculed and traduced ; just as Spener and Franke were, in their noble and successful attempt to unite science and religion, by founding the University

of Halle. But God ultimately crowned the labors of the German philanthropists with success and honor ; as I doubt not he will do to the philanthropists of New England.

A second ground of confidence in the future prosperity of the College, rests upon the Charity Fund. The interest on this fund, with a smaller charity devoted to the same object, will pay the entire College bills of fifty students, who are looking forward to the Christian ministry. And can it be doubted, that among the pious youth in the humbler walks of life, at least that number will be ever ready to avail themselves of its benefits, to enable them to go out as faithful heralds of the cross ? The great numbers that have already been carried along by this noble benefaction, are an earnest of the future.

A third ground of hope for the College, lies in the fact, that besides the Charity Fund, buildings, libraries, apparatus, specimens, and a small real estate, several liberal benefactions and legacies have been secured, or promised, to found professorships, assist indigent pious young men, or for other purposes.—More than fifty thousand dollars have been already made sure for these objects by the decease of testators, or by actual payment,\* though but a small part of this amount can as yet be used for the benefit of the College. Some twenty thousand dollars more are pledged for similar objects by individuals still living, but not payable till their decease. The debt of the College at this time does not exceed twelve thousand dollars : while the subscriptions which are now due, or will be in a few years, and not reckoned in the above sums, are fully sufficient to pay this debt. These facts show us, that although at present the College has almost no funds which it can employ for its current expenses, yet it is certain at a future time, of an amount, which, if not large, will much increase its means of usefulness ; and equally certain that its debt will soon be cancelled. If, therefore, we can struggle along for a few years with our pres-

\* The endowment of the Williston Professorship of Rhetoric and Oratory, by Hon. Samuel Williston, on the day in which this address was delivered, enables me to give a more favorable account of the pecuniary state of the College than I did on that occasion. This noble benefaction,—the largest we have ever received from an individual,—in addition to Mr. Williston's well known liberality to other objects, entitles him to the warmest thanks of the Institution. Yet as this endowment is not payable till three years hence, the statement made in the text respecting the present straitened circumstances of the College, remains true.

ent very limited pecuniary means, we may be sure that the period of enlargement is not very distant. For these cheering prospects we are largely indebted to the indefatigable efforts of the present general agent; and if, as he soon resigns his commission, and resumes the Christian ministry, he shall be able, as he hopes, to see the College debt nearly or quite liquidated, the result will be to him an ample reward for his labors and sacrifices, and of high gratification to all the friends of the Institution.

A fourth ground of hope, lies in the system recently adopted by the Trustees and Faculty, of bringing the expenses of the College within its income, without at all diminishing the amount of instruction, or lowering the standard of scholarship.

This is accomplished by the voluntary offer of the Faculty, to conduct for the present, the instruction and other ordinary concerns of the College, for its annual income, whatever that may be. This will of course prevent the College running in debt; and thus render application to the friends of learning unnecessary, so far as its expenses are concerned: and we have seen how its present debt may be liquidated. How much sacrifice this course may require on the part of the instructors, they know not. Their most anxious enquiries have been, whether duty demanded the effort, and whether it would secure the chief objects aimed at; viz: to save the College from an increase of debt, and prevent applications to the public for pecuniary aid. They are willing to make the experiment, trusting in God to crown it with success.

The means of instruction provided at this Institution, furnish another ground of promise for its success.

Its buildings are provided with ample and convenient public and private rooms. Its philosophical apparatus is of a superior kind, and admirably fitted for a full course of demonstrative lectures. Its laboratory is also provided with every thing requisite for all the important experiments of chemistry: and its cabinet of Natural History, contains more than 14,000 specimens. Among them, is one of the largest and most complete examples of that admirable invention of Dr. Auzoux, called the Manakin. By this perfect man-model, all that knowledge

of the anatomy and physiology of the human system, needed for illustrating Natural Theology, and, indeed, for all educated men except the physician, can be obtained with astonishing facility, without the need of disgusting dissections. The volumes in the different libraries amount to fifteen thousand. And although here great additions are desirable, yet such additions are important for the instructors, rather than the students ; since the number now possessed, and the selections, are such, as to afford the latter abundant means for every investigation which they have time or occasion to make. But for the more ample researches which the duty of the instructors requires them to undertake, they must often resort to the large libraries abroad.

Exclusive of my own department, it may not be improper for me to speak of the manner in which the different professorships are filled : since it is the result of long personal observation, and I would hope that my judgment is not essentially warped by private friendship. In the department of Rhetoric and Oratory, we have a gentleman well known for his long and thorough study of these and collateral branches, and for the success with which he has taught them in other institutions. Intellectual and Moral Philosophy are under the care of one, who is not only honored by the literary public, for his able works on ancient literature, but admirably qualified, in the opinion of all who are conversant with psychology, to unravel that difficult subject. Mathematics and Natural Philosophy are in the hands of one, who unites in an eminent degree, an accurate acquaintance with principles, to a most happy and skillful tact in experimental illustrations. The ancient languages are taught by one, who, to ample ability unites indefatigable industry and scrupulous fidelity, and whose long experience has taught him to select the most important points in his wide department, and to present them in proper proportion. And finally, to say nothing of aid from able tutors, I hardly need speak of the ability with which Chemistry and Natural History will be taught, by one so well known as is their incumbent, through the scientific world, by his able works, and for his skill and success in the manipulations of the laboratory. In short, can we doubt that the ability with which these several departments are

now filled, will satisfy all the reasonable expectations of the young gentlemen who come hither for instruction, and meet the approbation of the public.

In the next place, the location of the College is an omen favorable to its success.

It needs no labored argument to show how many are the advantages of having it situated in the centre of New England, and among a population well known for intelligence, and for the controlling influence of moral and religious principles; such in fact, as occupy the broad valley of the Connecticut. Nor need I stop to show how favorable it is, that the community in which it is immediately placed, have made such great efforts and sacrifices to sustain it, and, therefore, take a deep interest in its inmates, and in its prosperity; and are still willing to do all in their power to promote its welfare. Then too, while we are slightly withdrawn from the bustle and exciting and demoralizing influences of our great thoroughfares of travel, we have rail roads chartered, and in a course of construction, that will certainly be only a few miles distant, and will ere long probably come to our doors: at any rate, they will be quite as near as is desirable for a literary institution.

But one of the most attractive circumstances of our location, to the man of taste,—and every student should be a man of taste,—is the fine amphitheatre of scenery that surrounds us. How rich the gentle slopes of yonder distant mountains, that bound the Connecticut valley on either side! How striking Mount Sugar Loaf on the north, with its red belted and green tufted crown: and Mount Toby too, with its imposing outline of unbroken forest! Especially, how beautifully and even majestically does the indented summit of Mount Holyoke repose against the southern sky! What sunrises and sunsets do we here witness; and what a multitude of permutations and combinations pass before us during the day, as we watch from hour to hour, one of the loveliest landscapes of New England. Surely if there is any poetry in the student's soul,—if any love of nature,—they must be here developed. And how can he but cherish enabling thoughts and purposes, whose eyes are continually feasted with such noble prospects!

Last, though not least, the number and character of the graduates of this College, are an earnest of its prosperity.

These are our epistle, known and read of all men. Nor are we ashamed to have it read. For though the paper was theirs, we claim to have had a part in moulding the sentiments, and in forming the letters, and the superscription. Now and then, indeed, in any College, an individual gets smuggled through, whom the instructors regret not having winnowed out with the rest of the chaff. But of the seven hundred graduates of this College who still survive, how few are of this description. Not less than four hundred of them have devoted themselves to the Christian ministry: about thirty of whom are in foreign missionary fields; and the rest mostly settled over Congregational, Baptist, or Episcopal churches in our land, or are in a course of preparation for the ministry. A large proportion of the remainder are established in the Legal and Medical professions. With nearly all these I am personally acquainted: and of them retain those agreeable recollections, which lead me to count with confidence upon the exertion of their influence in favor of their Alma Mater.

For these reasons among others, we may feel assured of the ultimate prosperity and success of this Institution. But I do not wish to conceal the fact from myself, or others, that at present we are passing through an exigency, of the character already explained, that demands self-denial and sacrifice, and much wisdom and grace, so as not to retard the season of the highest and most permanent prosperity. And at such a season, I feel no ordinary reluctance to take hold of the helm: especially when I remember the distinguished character for wisdom and piety, of those who have preceded me in this office; one of whom has just given his parting and instructive counsels. Concerning him, indeed, it would not be proper in this place to utter the sentiments prompted by the highest respect and personal friendship. But I may reciprocate the kind wishes he has expressed for us, in the hope and prayer that the evening of his days may be as useful as their meridian, and far happier.

Under such circumstances, the office to which I am called, can present few attractions to human ambition. With me, often

called in years past to assume it temporarily, as a *locum tenens*, it has not even the charm of novelty. And then, why should I desire to leave a department to which I am attached strongly, and where, if any where, I might hope for success, for one which I know to abound in onerous and difficult duties, and which exposes its occupant to severe criticism: especially, when after a struggle of so many years with an enfeebled constitution, I feel the need of a diminution instead of an increase of care and labor; and had actually been taking measures for a temporary release from my duties. The Trustees have, indeed, kindly allowed me to retain a large part of my past course of instruction, which summons me often abroad into the fields, and the mountains: for they well know that it would be suicidal to abandon those active habits, which, for the last thirty years, have been as necessary as my daily food: and without which, I should long since have been in my grave.

But all these difficulties, affecting only my personal convenience, I could cheerfully encounter, were I only convinced that I shall be able to meet the expectations of the Trustees and the public, in the successful management of the Institution. But here it is right to confess, that my judgment coincides with my feelings, in the conclusion that I am unadapted to meet the present exigency. My feeling is,

Non tali auxilio, nec defensoribus istis  
Tempus eget.

But I yield to the judgment of the Trustees and friends of the College, so far as I know it to have been expressed, and cheerfully attempt the experiment in reliance upon able coadjutors, upon the liberality of the friends of the College, and above all, upon help from on High. But should the result be, that my opinion proves the correct one, I shall gladly resume my former place, if wanted, or seek some other sphere to which I am better adapted; nor feel mortified in having failed in a station to which I never aspired, which I assume reluctantly, and where my own judgment predicted failure.

But though I enter upon these duties with a deep sense of incompetency, think not that I, or my colleagues, take hold of our

work with a faint and irresolute heart. Having made up our minds that this is the post of duty, we mean to stand firm by it, so long as God shall add his blessing, and the public shall patronize our labors. We boldly avow it as our leading object, to make science and literature subservient to the cause of religion : and we will not believe, till a fair trial has been made, that a religious public, or the noble minded youth who come hither for instruction, will wish us to adopt a lower standard. We would not forget that this was the object aimed at by the founders of this College, and by all the benevolent men who have aided in bringing it to its present state ; and as we ply our oars from day to day, we cannot but be stimulated to effort by their united voice, crying in our ears,—

*Μή δειδίθι, Καίσαρα φίλεις, καὶ τὴν Κλησαρος τι' χηρ.*

If it be expected on this occasion, that I should say any thing of the principles on which the government of the College will be conducted, I must confess, that on this point I feel my incompetency more than upon any other ; and hardly dare lay down any positions beforehand. As to some general principles, however, my mind is settled. One is that the government should be, essentially, of a parental character. One important inference from this principle, is, that public censure and disgrace should be inflicted as rarely as possible. On the other hand, private advice, warning, and expostulation, should be begun upon the earliest evidence of deviation, or even of danger, to the inexperienced youth. I would carry this principle so far, that I would not bring the public and formal authority of the College to bear upon the case, until I considered it nearly hopeless.

Another important fact, on which I would base very much of the discipline of College is this : Every young gentlemen who comes here,—with scarcely an exception,—knows very well how he ought to conduct, and how he must conduct, in order to go successfully through his four years course. And I would say to him, “ here are our rules, which we have found necessary ; and if you join us we shall place entire confidence in your disposition and determination to observe them. We throw you on your

own responsibility, as a young gentleman who knows how to conduct and can be trusted. We shall not exercise over you any vile system of espionage, or suspect you of any secret and dishonorable course, until forced to it by the strongest evidence." Now in the hearts of most young men, before they have become corrupt, there is too much of true nobility, to abuse such confidence, and meanly to violate rules which they know to be good, and which they have promised to observe. Let them be trusted therefore, and let not unreasonable suspicion destroy their self-respect and sense of honor. But if you are compelled at length to give up your confidence in the integrity of an individual,—and a practised instructor sees this very early,—let him be privately told, that since he cannot conform to the rules of the Institution, and is receiving no benefit from it, and the influence of his example is bad, he had better leave it before it is necessary to make his case public, and while he can do it without disgrace. And the more I see of College life, the better satisfied I am, that these private dismissals are apt to be delayed too long, both for the student and the institution.

But I will not enlarge further upon this subject. A single point more, and I will relieve this exhausted audience. And yet probably this point is of more importance than every thing else which I have said.

I have intimated that the principal immediate cause of the embarrassments of our College is a deficiency of pecuniary means. And it is very natural, when we find our hands tied, and every desirable improvement checked from this cause, to feel that this is the sole and the original source of all our perplexities. Nay, we are tempted to exclaim, with the father of epic poetry, in a sentiment which none but a poor man ever would have conceived,

*Χρυσὸς αρόγει πάντα, πάντας πιέζει.*

But I am afraid there is a cause, and a principal one too, that lies deeper than this: a cause which has been too much overlooked; but to which in fact, may be traced even our pecuniary deficiencies. I mean a diminution of that sense of dependence on God, and faith in Him, which characterized the found-

ers of this Institution. The object with them that swallowed up all others, was to make learning subservient to human salvation: and in endeavoring to gain such an object, they knew they might confidently rely upon Divine help to dispose the hearts of the Christian public to aid them. But I fear that we, who have entered into their labors, have in a measure mingled other objects with the great original one, and as a consequence, have been led to rely too much upon human plans and human wisdom. We expect too much from worldly policy, and too little from faith and prayer. When success attends our efforts, we think too much of the instrumentality; and when we meet with rebuffs and discouragement, we impute it to anything rather than to our departures from God. Indeed, among the numerous reasons that have been assigned for our embarrassments, I have never heard this named, which I fear lies at the foundation of the whole,

If there be any truth in these suggestions, (and indeed, if there be not,) then the grand thing wanted among the instructors and friends of this College, is, a deeper conviction of the importance of the grand object for which it was founded, and a determination to baptize every effort for its advancement in faith and prayer. Let us never forget, that *promotion cometh neither from the east nor the west, nor from the south: But God is judge: He setteth up one, and putteth down another.* How easy for him to blast the fairest schemes, and to prosper the weak and the trembling! Nor let our confidence in Him, or in the prosperity of this Institution, be shaken, because it has been called to pass through straits, and other conflicts may still await it. We believe that these storms in its youth, are intended, by a wise Providence, only to make its roots strike deeper, and to give its trunk greater strength, and its branches wider extension in its maturity. Only let faith hold on firmly to the principle, that God will assuredly crown with success every sincere, effort to bind the wreath of learning around the brow of Religion, and cheerfully and resolutely shall we consecrate ourselves to the great work of sustaining and advancing this Institution; and though we shall not be allowed to labor long here, or elsewhere, yet while we live, and when we die, we may confidently utter

in behalf of its pupils, its guardians, and all its future interests, the prayer of a heathen, with a Christian meaning, and a Christian spirit:

Dii probos mores docili juventæ,  
Dii senectuti placidæ quietem  
Romulœ genti date remque prolemque  
Et decus omne !



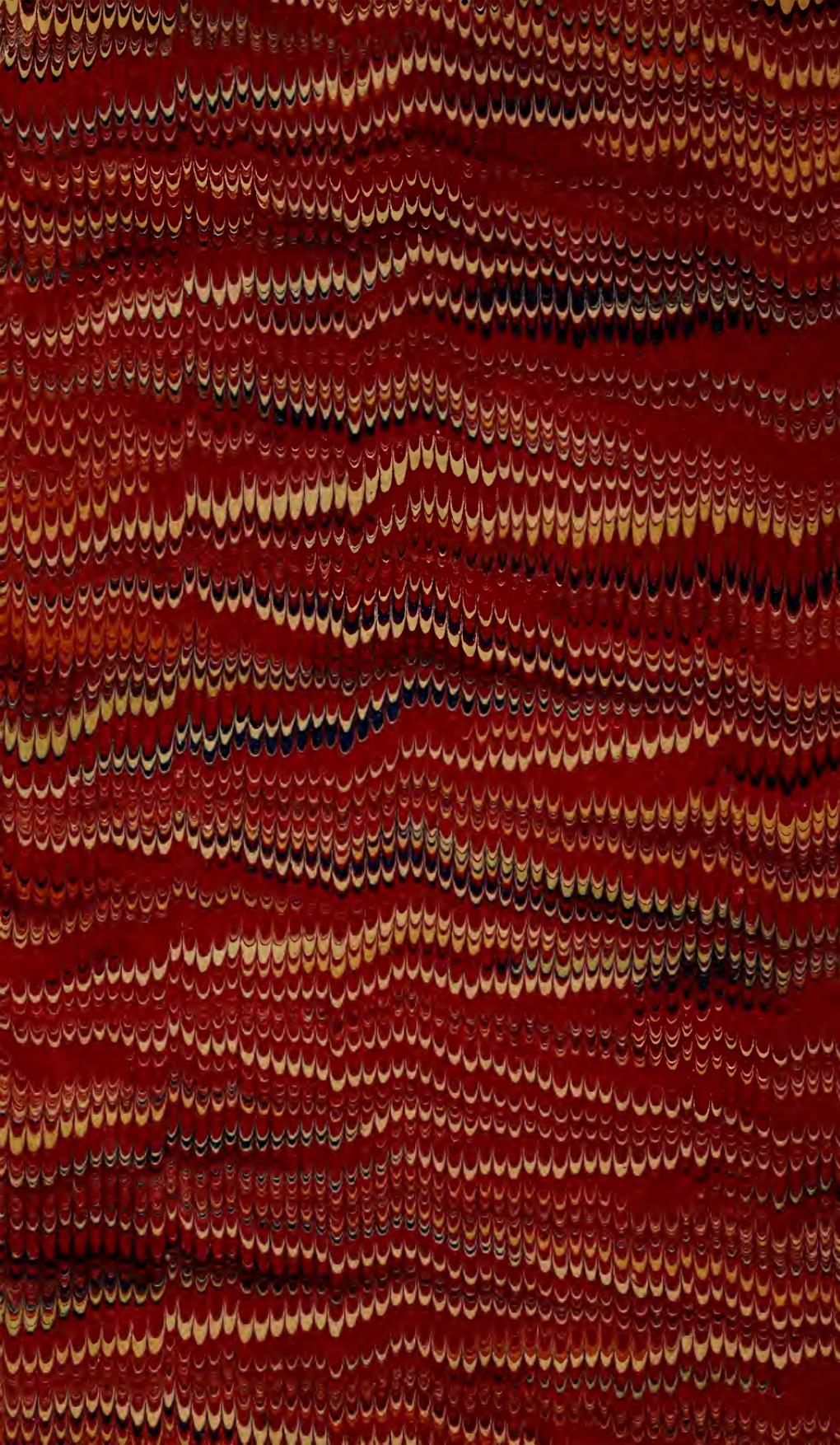














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